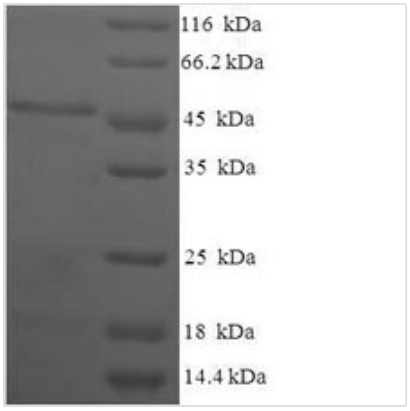
Recombinant Human Estradiol 17-beta-dehydrogenase 11 (HSD17B11)

Product Code	CSB-EP843318HU
Relevance	Can convert androstan-3-alpha,17-beta-diol (3-alpha-diol) to androsterone in vitro, suggesting that it may participate in androgen metabolism during steroidogenesis. May act by metabolizing compounds that stimulate steroid synthesis and/or by generating metabolites that inhibit it. Has no activity toward DHEA (dehydroepiandrosterone), or A-dione (4-androste-3,17-dione), and only a slight activity toward testosterone to A-dione. Tumor-associated antigen in cutaneous T-cell lymphoma.
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	Q8NBQ5
Alias	17-beta-hydroxysteroid dehydrogenase 11 ;17-beta-HSD 11 ;17bHSD11 ;17betaHSD1117-beta-hydroxysteroid dehydrogenase XI ;17-beta-HSD XI ;17betaHSDXICutaneous T-cell lymphoma-associated antigen HD-CL-03 ;CTCL-associated antigen HD-CL-03Dehydrogenase/reductase SDR family member 8Retinal short-chain dehydrogenase/reductase 2 ;retSDR2Short chain dehydrogenase/reductase family 16C member 2
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	ESFVKLFIPKRRKSVTGEIVLITGAGHGIGRLTAYEFAKLKSKLVLWDINKHGLE ETAAKCKGLGAKVHTFVVDCSNREDIYSSAKKVKAEIGDVSILVNNAGVVYTSD LFATQDPQIEKTFEVNVLAHFWTTKAFLPAMTKNNHGHIVTVASAAGHVSVPFL LAYCSSKFAAVGFHKTLTDELAALQITGVKTTCLCPNFVNTGFIKNPSTSLGPTL EPEEVVNRLMHGILTEQKMIFIPSSIAFLTTLERILPERFLAVLKQKISVKFDAVIG YKMKAQ
Lead Time	3-7 business days
Research Area	Metabolism
Source	E.coli
Gene Names	HSD17B11
Expression Region	20-300aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-SUMO-tagged

Mol. Weight	46.8kDa
Protein Description	Full Length of Mature Protein

Image



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Description

The recombinant Human HSD17B11 was expressed with the amino acid range of 20-300. The theoretical molecular weight of the HSD17B11 protein is 46.8 kDa. Expression of this HSD17B11 protein is conducted in e.coli. The N-terminal 6xHis-SUMO tag was fused into the coding gene segment of HSD17B11, making it easier to detect and purify the HSD17B11 recombinant protein in the later stages of expression and purification.

Human Estradiol 17-beta-dehydrogenase 11 (HSD17B11) is an enzyme involved in the conversion of estrone to estradiol, a key step in estrogen biosynthesis. HSD17B11's main role in steroid hormone metabolism positions it as a significant player in endocrine regulation. In medical and reproductive research, studying HSD17B11 provides insights into hormone-related conditions and potential therapeutic targets for estrogen-dependent diseases. Its involvement in cancer progression implicates HSD17B11 in oncology research, offering avenues for targeted therapies. Investigating HSD17B11 spans endocrinology, reproductive medicine, and oncology, contributing to a comprehensive understanding of hormone dynamics and presenting opportunities for developing therapeutic strategies for hormone-related disorders and cancers.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL.We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.